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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/717,412

Applicant(s)

MCLERNON ET AL.

Examiner

PHENUEL S. SALOMON

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-17,20-26,29,34 and 36-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-17,20-26,29,34,36-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on March 17, 2009. Claims 26 has been amended, claims 2, 5, 18, 19, 27, 28, 30-33 and 35 had been previously canceled, and claims 1, 3, 4, 6-17, 20-26, 29, 34, 36-48 are pending.
2. The rejections of Claims 26 and 29 under 35 U.S.C. 101 as directed to non-statutory subject matter have been withdrawn pursuant to applicant's amendments.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-4, 9-13, 23-24, 26, 29, 36-39, and 42-44 are rejected under 35 U.S.C. 102(e) as being unpatentable over Fritzpatrick et al. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink.

Claim 1: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation at least one destination block in said block diagram; and (col. 1, lines 42-49); and

instructions for propagating said selected at least one characteristic to said destination block (col. 2, lines 1-14).

instructions for selecting at least one characteristic of a source block in a block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions", p. 2-5, section "Block Parameters and p. 2-9, item 2"). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 3: Fritzpatrick and Simulink disclose the medium as in claim 1 above, Fritzpatrick further discloses comprising: instructions for creating a data structure for the selected at least one characteristic in said data structure having a plurality of substructures (col. 4, lines 23-26).

Claim 4: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses said selecting at least one characteristic involves the use of a category list, said at least one characteristic associated with at least one category of said category list (col. 4, lines 4-9).

Claim 9: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses propagating said selected at least one characteristic involves propagating less than all of the source block (col. 2, lines 19-29).

Claim 10: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses propagating involves propagating less than all characteristics of the source block, as specified by a user (col. 2, lines 19-29).

Claim 11: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses selecting involves selecting said at least one characteristic to be propagated from a Graphical User Interface (col. 2, lines 19-27).

Claim 12: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses said selecting involves selecting said at least one characteristics to be propagated by the use of a short key (col. 4, lines 13-21).

Claim 13: Fritzpatrick and Simulink disclose the medium as in claim 1 above Fritzpatrick further discloses propagating involves propagating less than all characteristics of the source block, as automatically determined based on characteristics of said source block and characteristics of said destination block (abstract, lines 3-15).

Claim 23: Fritzpatrick and Simulink disclose a medium as in claim 1 above Fritzpatrick further discloses said destination block does not have said characteristic prior to said propagating (col. 2, lines 34-47).

Claim 24: Fritzpatrick discloses a system comprising:

A memory (ram) configured to hold a block diagram having a plurality of blocks (col. 4, lines 10-20); and

a processor configured to:

receive a designation of a destination block in said plurality of blocks diagram(col. 1, lines 54-57);

propagate said selected at least one characteristic to said destination block (col. 2, lines 1-14).

select at least one characteristic of a source block in a block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions", p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 26: Fritzpatrick discloses an apparatus comprising:

means for receiving a designation of at least one destination block in said block diagram; and (col. 1, lines 42-49); and

means for propagating said characteristic to said destination block (col. 2, lines 1-14);

means for selecting at least one characteristic of a source block in a block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions" p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 29: Fritzpatrick and Simulink disclose the apparatus as in claim 26 above Fritzpatrick further discloses said selecting involves selecting said at least one characteristic to be propagated from a Graphical User Interface (col. 2, lines 19-27).

Claim 36: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation at least one destination component in said circuit diagram; and (col. 1, lines 42-49);

instructions for propagating said selected at least one characteristic to said destination component (col. 2, lines 1-14);

instructions for selecting at least one characteristic of a source component in a circuit diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions" p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One

would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 37: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation of at least one destination component in said mechanical diagram; and (col. 1, lines 42-49); and

instructions for propagating said selected at least one characteristic to said destination block (col. 2, lines 1-14);

instructions for selecting at least one characteristic of a source component in a mechanical diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section “System Functions” and p. 2-5, section “Block Parameters” and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 38: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation at least one destination graphical element in said biological diagram; and (col. 1, lines 42-49); and

instructions for propagating said characteristic to said selected at least one destination graphical element (col. 2, lines 1-14)

instructions for selecting at least one characteristic of a source graphical element in a biological diagram(col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section “System Functions” p. 2-5, section “Block Parameters” and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 39: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation of at least one destination graphical element in said network diagram; and (col. 1, lines 42-49); and

instructions for propagating said selected at least one characteristic to said at least one destination graphical element (col. 2, lines 1-14)

instructions for selecting at least one characteristic of a source graphical element in a network diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section “System Functions” and p. 2-5, section “Block Parameters” and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 42: Fritzpatrick discloses a computer-implemented method comprising:

receiving a designation at least one destination block in a block diagram (col. 1, lines 42-49); and

propagating said selected at least one characteristic to the least one destination block (col. 2, lines 1-14)

selecting at least one characteristic of a source block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section “System Functions” p. 2-5, section “Block Parameters” and p. 2-9, item 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

Claim 43: Fritzpatrick and Simulink disclose the method as in claim 42 above, Fritzpatrick further discloses comprising determining said at least one destination block in a same block type as at least one source block in said plurality of source blocks (col. 2, lines 1-14); (Examiner note: source and destination blocks should be the same block type in order to share the same characteristic).

Claim 44: Fritzpatrick and Simulink disclose the method as in claim 42 above, Fritzpatrick further discloses said at least one destination block is designated based on said selected at least one characteristic, said selected at least one characteristic matching a characteristic of said at least one destination block (col.2, lines 19-27).

5. Claims 8, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Budinsky et al. (US 6,407,753).

Claim 8: Fritzpatrick and Simulink disclose a medium as in claim 1 above, but do not explicitly disclose the step of undoing said propagating step by returning characteristics of said destination block to a condition existing prior to said propagating step. However, Budinsky discloses a

multi-level undo/redo and direct rules manipulation (col. 3, lines 28-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include undoing propagating characteristics in Fritzpatrick. One would have been motivated to do so in order to efficiently reinstate the affected block to its original state.

Claim 25: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation of a source block in a block diagram; and (col. 1, lines 54-57);

instructions for propagating said selected at least one characteristic to said destination block (col. 2, lines 1-14),

instructions for selecting at least one characteristic of a source block in a block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions" p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

but do not explicitly disclose

instructions for receiving a designation of a plurality of destination blocks in a block diagram; and

However, Budinsky discloses:

instructions for receiving a designation of a plurality of destination blocks in a block diagram; and (col. 1, lines 42-49). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the above steps in Fritzpatrick. One would have been motivated to do so in order to quickly deploy the pertinent characteristic among blocks.

Claim 34: Fritzpatrick and Simulink disclose a computer-readable medium holding electronic device computer-executable of instructions, the medium comprising:

instructions for propagating said selected at least one characteristic to said destination graphical object (col. 2, lines 1-14);

instructions for selecting at least one characteristic of a source graphical (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions" p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system.

But does not disclose in a Unified Modeling Language (UML) diagram;

instructions for receiving a designation of at least one destination graphical object (col. 1, lines 42-49) but does not disclose in said UML diagram. However, Budinsky discloses the use of Unified Modeling Language (col. 2, lines 30-36). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use Unified Modeling Language in Fritzpatrick. One would have been motivated to do so in order to specify a concrete graphical notation for abstract models of various system views

6. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Iriuchijima (US 6,070,006).

Claim 7: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose said destination block is a subsystem block representing a plurality of lower-level blocks and said propagating is restricted to propagating to said subsystem block without propagating to said plurality of lower-level blocks. However, Iriuchijima discloses non-inheritance attributes from parent to child class (col. 2, lines 36-42). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include propagation restriction in Fritzpatrick. One would have been motivated to do so in order to prevent propagation of attributes to block of different nature.

Claim 21: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose said source block are a predetermined member of a plurality of said

destination blocks. However, Iriuchijima discloses inheritance attributes from parent to child class (col. 1, lines 36-54). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include predetermined member in Fritzpatrick. One would have been motivated to do so in order to quickly deploy attributes to blocks of the same nature.

7. Claims 6, 16-17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Dhond (US 6,195,092).

Claim 6: Fritzpatrick and Simulink disclose the medium as in claim 1 above, wherein said destination block is a subsystem representing a plurality of blocks (col. 1, lines 58-61), but do not explicitly disclose said at least one characteristic is propagated to each of said plurality of blocks. However, Dhond discloses one or more graphical objects where attributes are being propagated (col. 6, lines 15-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristic propagation in Fritzpatrick. One would have been motivated to do so in order to simultaneously edit or update multiple blocks attribute in one display.

Claim 16: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose comprising instructions for determining which blocks of said block diagram have characteristics corresponding to the selected at least one characteristic in said selecting.

However, Dhond discloses the selection of the attributes of the first graphical objects (col. 6, lines 1-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the step of determining which blocks corresponding to the at least one characteristic in Fritzpatrick. One would have been motivated to do so in order to accurately identify the associated blocks and thus assuring efficient attribute propagation.

Claim 17: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose comprising instructions for determining which blocks of said block diagram have characteristics that could be propagated to said destination block. However, Dhond discloses the selection of the attributes of the first graphical objects (col. 6, lines 15-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the step of determining which blocks corresponding to the at least one characteristic in Fritzpatrick. One would have been motivated to do so in order to accurately identify the associated blocks and thus assuring efficient attribute propagation.

Claim 20: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose said selecting at least one characteristic is performed before said designating at least one destination block. However, Dhond discloses the selection of the attributes of the first graphical objects (col. 6, lines 15-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the step of selecting characteristic in Fritzpatrick. One would have been motivated to do so in order to efficiently identify the associated source and destination objects.

Claim 22: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but do not explicitly disclose designation of at least one destination block is performed from a text-based list. However, Dhond discloses display of graphical objects within a spreadsheet-like graphical user interface (col. 6, lines 1-6). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a text-based list of blocks in Fritzpatrick. One would have been motivated to do so in order to better facilitate the selection of block from a wide variety of choices.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Shudo et al (US 6,300,949 B1).

Claim 14: Fritzpatrick and Simulink disclose the medium as in claim 1 above, but does not explicitly disclose comprising instructions storing information relating to propagating to enable repeating said propagating. However, Shudo discloses stored attribute information for further propagating (col. 2, lines 1-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include storing information relating to propagating step in Fritzpatrick. One would have been motivated to do so in order to facilitate a faster propagation of the same attribute on a larger scale.

Claim 15: Fritzpatrick and Simulink disclose the medium as in claim 14 above, but does not explicitly disclose said storing comprises storing information relating to multiple iterations of said propagating. However, Shudo discloses stored attribute information for further propagating (col. 2, lines 18-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include multiple iterations of propagating step in Fritzpatrick. One would have been motivated to do so in order to easily deploy the same attribute on a larger scale.

9. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick, (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Zink et al (US 6,738,964 B1).

Claim 40: Fritzpatrick discloses a computer-readable medium holding computer executable instructions, the medium comprising:

instructions for receiving a designation at least one destination line associated with a third block and a fourth block of said block diagram; and (col. 1, lines 42-49); and

instructions for propagating said selected at least one characteristic to said destination line (col. 2, lines 1-14)

instructions for selecting at least one characteristic associated with a first block and a second block of a block diagram (col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled

attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section “System Functions” p. 2-5, section “Block Parameters” and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system. But do not explicitly disclose a source line.

However, Zink discloses at least one source line associated with a first block and a second block of said block diagram (fig. 9). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include Zink's plurality of source lines in Fritzpatrick. One would have been motivated to do so in order to quickly deploy pertinent characteristics among blocks.

Claim 41: Fritzpatrick, Simulink and Zink disclose the medium as in claim 40 above, Zink further discloses said second block and said third block are the same block (fig. 9) [usage of the same block is inherent since they have the same characteristics]. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use the same two blocks in Fritzpatrick. One would have been motivated to do so in order to provide a better system data filtering capability.

10. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Santori (US 2003/0132964 A1).

Claim 45: Fritzpatrick and Simulink disclose the method as in claim 44 above, but do not explicitly disclose said at least one characteristic indicates that said at least one destination block is representative of a virtual subsystem. However, Santori discloses creating virtual instrumentation system (page 1, para [0009]). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include virtual subsystem in Fritzpatrick. One would have been motivated to do so in order to clearly identify characteristics propagation within block diagram environment.

11. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Singh (US 2003/0132964 A1).

Claim 46: Fritzpatrick, Simulink disclose the method as in claim 42 above, but do not explicitly disclose said at least one destination block is a subsystem representing a plurality of blocks and said selected at least one characteristic is propagated to each of said plurality of blocks in said subsystem. However, Singh discloses blocks can be interconnected to form a subsystem (page 1, para [0003]). Therefore it would have been obvious to one having ordinary skill in the art at the

time of the invention to include subsystem in Fritzpatrick. One would have been motivated to do so in order to facilitate the distribution of characteristics among blocks in the subsystem.

12. Claims 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzpatrick et al. (US 6,877,138 B2) in view of The MathWorks (using Simulink, Version 5) hereinafter Simulink and in further view of Miloushev et al. (US 2002/0069400 A1).

Claim 47: Fritzpatrick discloses a medium holding computer-executable instructions, the medium comprising:

instructions for receiving a designation of a first destination block and a second destination block in said block diagram (col. 1, lines 42-49); and

instructions for propagating said selected at least one characteristic to said first destination block and said second destination block (col. 2, lines 1-14), but does not explicitly disclose said first value propagated to said first destination block and said second value propagated to said second destination block.

instructions for selecting at least one characteristic of a first source block and a second in a block diagram(col. 2, lines 19-29), but does not explicitly disclose said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter. However, Simulink discloses each simulink block type is associated with set of system functions that specify time-dependent relationships among its inputs, states, and outputs (page 2-4, section "System Functions" p. 2-5, section "Block Parameters" and p. 2-9, item 2). Therefore, it would have been obvious to one having ordinary

skill in the art at the time the invention was made to include characteristics in Fritzpatrick. One would have been motivated to do so in order to offer setting attributes option to users while operating the system. But do not explicitly disclose said first source block having said characteristic of a first value, said second source block having said selected at least one characteristic of a second value;

However, Miloushev discloses:

said first source block having said characteristic of a first value, said second source block having said selected at least one characteristic of a second value (page 8, para [0142] and [0147])

said first value propagated to said first destination block and said second value propagated to said second destination block (page 8, para [0138]). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include these features in Fritzpatrick. One would have been motivated to do so in order to quickly deploy pertinent characteristics among blocks.

Claim 48: Fritzpatrick, Simulink and Miloushev disclose the medium as in claim 47 above, Miloushev further discloses said propagating step determines said first destination block and said second destination block by the use of respective contexts relative to said first source block and said second source block (page 8, para [0138]). One would have been motivated to do so in order to quickly deploy pertinent characteristics among blocks

Response to Arguments

13. Applicant's arguments with respect to claims 1, 3, 4, 6-17, 20-26, 29, 34, 36-48 filed on 10/10/2007 have been fully considered but they are not persuasive.

Applicants urge that neither reference provides an enabling disclosure with regards to propagating a selected at least one characteristic to a destination block, where the selected at least one characteristic is at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter.

In response, examiner respectfully disagrees and notes that Simulink discloses Key properties of many standard blocks are parameterized. For example, the gain of the Simulink Gain block is a parameter. Each parameterized block has a block dialog that lets you set the values of the parameters when editing or simulating the model. You can use MATLAB expressions to specify parameter values (page 2-4, section "System Functions"). Furthermore, Simulink uses a process called attribute propagation where the process entails propagating the attributes of a source signal to the inputs of the blocks that it drives (Model Initialization Phase, p. 2-9, item 2). Simulink clearly cures the deficiencies of Fritzpatrick with respect to teaching the propagating at least one characteristic to a destination block.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply

is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Reddy et al. (US 2003/0098880 A1) discloses system and apparatus for programming...

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phenuel S. Salomon whose telephone number is (571) 270-1699. The examiner can normally be reached on Mon-Fri 7:00 A.M. to 4:00 P.M. (Alternate Friday Off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PSS
06/02/2009

/Weilun Lo/
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